

Work Order ID 56141

February 11, 2010 7:45:48 AM

Page 1

Item ID: D3155-042

Accept

Setup Start

Revision ID:

Stop

Item Name: Bracket Assembly

Start Date: 2/11/10 Start Qty: 5.00

Required Date: 2/26/10 Req'd Qty: 5.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3155

Rev D

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: (2.000" x 1.000") x 6.87" Long Bar

MNF
10/02/14

5

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine as per Folio FA315 and Dwg D3155112-Deburr and Tumble 13-
Identify as D3155-2

MNF
DJP 10/02/17 5

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

DJP 10/02/17

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56141

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Page 2

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Cust Item ID:

Required Date: 2/26/10 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

SP 10/04/17

5 0

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

BK 10/02/17

0 0

Hand Finishing

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

HL 10/02/17

0 0

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56141

February 11, 2010 7:45:49 AM



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Item ID: D3155-042

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Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 2/11/10 Start Qty: 5.00



Cust Item ID:

Required Date: 2/26/10 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160



Small Fab

Small Fab

0.00

Memo

0.00

Press fit bushing as per Dwg D3155

EB

9/50/03/02 (5)

170



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

8/20/02

(75)

180



Packaging

Packaging

Identify as per dwg & Stock Location: _____

Memo

0.00

0.00

6/4/3/3 (5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 56141

February 11, 2010 7:45:49 AM

Page 4

Item ID: D3155-042

Accept

Revision ID:

Item Name: Bracket Assembly

Start Date: 2/11/10 Start Qty: 5.00

Required Date: 2/26/10 Req'd Qty: 5.00

Reference:

Approvals: Process Plan: Date:

QC: Date:

Tooling: Date:

SPC (Y/N): Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

10/03/03
MF
10-3-3

Picklist Print

February 11, 2010 7:45:47 AM

Page 1

Work Order ID: 56141

Parent Item: D3155-042

Parent Item Name: Bracket Assembly

Comments: IPP B 03.02.03 Reformat KJ/RF
IPP Rev: C As per Rev D 07-06-09 JLM

Start Date: 2/11/10

Required Date: 2/26/10

Start Qty: 5.00

Required Qty: 5.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3155-3		Manufactured	No			100	Each	8.0000	10.0000			



Bushing

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST68

53813

8

8

160

f

36.1045

3.0700

M6061T6B1.000X02.00
0

Purchased

No



6061-T6 Bar 1.00 x 2.00

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

MAT

107129

111571

112567

36.1045

7.03

19.3575

9.717



8/10/02/18
B56286 (22)

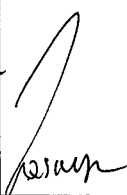

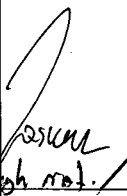
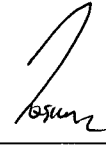

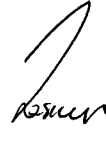
8

3.007

MW= 10/02/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3155-042 PAR #: _____ Fault Category: Machined Parts NCR: (Yes) No DQA: _____ Date: 10/03/16
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: _____ Date: 10/03/16

NCR: <u>56141</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/02/14	110	First part came out of machine out of tolerance fix with offset RL Set up was wrong/LOA		Scrap and replace <u>B 112567 x2</u>	<u>mmw</u> 10/02/14	<u>SK</u> 10/02/17		<u>S</u> 10/02/17
10/02/16	110	1 part popped out of vise ↳ modified programme for the 1/2 carb rougher does not grab the part. RL not holdy enough not/LOA		Scrap and replace <u>Batch # 112567 x1</u>	<u>DJP</u> 10/02/16	<u>SK</u> 10/02/17		<u>S</u> 10/02/17
10/02/16	110	1 part is out of tol. ↳ I did not notice offset from previous shift... RL operator error/LOA		Scrap and replace <u>Batch # 112567 x1</u>	<u>DJP</u> 10/02/16	<u>SK</u> 10/02/17		<u>S</u> 10/02/17

NOTE: Date & initial all entries

D3065-5DART AEROSPACE LTD		Work Order:	56141
Description: Bracket		Part Number:	D3155-2
Inspection Dwg: D3155	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.166	+0.005/-0.001	Ø .169	✓			
Ø0.375	+0.000/-0.005	Ø .375	✓			
6.150	+/-0.010	6.150	✓			
0.262	+/-0.010	.267	✓			
1.400	+/-0.010	1.399	✓			
0.307	+/-0.010	.305	✓			
1.969	+/-0.010	1.969	✓			
0.322	+/-0.010	.323	✓			
0.779	+/-0.010	.780	✓			
0.166	+/-0.010	.170	✓			
0.307	+/-0.010	.300	✓			
1.300	+/-0.010	1.296	✓			
0.130	+/-0.010	0.130	✓			
0.150	+/-0.010	0.146	✓			
0.150	+/-0.010	0.158	✓			
0.853	+/-0.010	.853	✓			
0.163	+/-0.010	0.160	✓			
R0.063	+/-0.010	R.063	✓			
5.455	+/-0.010	5.459	✓			
4.600	+/-0.010					
2.060	+/-0.010	2.064	✓			
0.021	+/-0.010	.026	✓			

Measured by:	MWF
Date:	

Audited by:	AA
Date:	10/26/17

Prototype Approval:	N/A
Date:	N/A

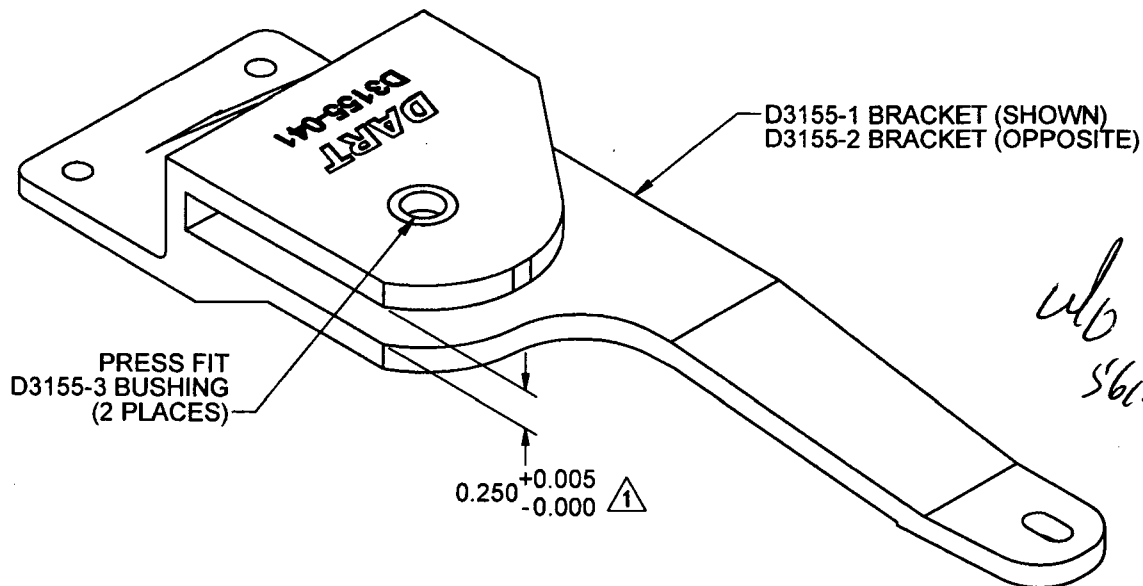
Rev	Date	Change	Revised by	Approved
A	06.06.28	New Issue	P/O D3155-042	KJ/JLM



DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED #	DRAWING NO. D3155	REV. D SHEET 1 OF 3
DATE 07.01.18		TITLE BRACKET ASSEMBLY	SCALE 1:1
REV	DATE	DESCRIPTION	
A	02.04.24	NEW ISSUE	
B	03.02.28	AS MANUFACTURED	
C	04.10.06	5.455 WAS 5.550	
D	07.01.18	ON D3155-1/-2, 0.699 DIM WAS REMOVED; 0.887 WAS 0.882; 3.150 WAS 3.148; ADD 0.250 DIM +0.005/-0.000	

RELEASED

07.06.04



D3155-041 BRACKET ASSEMBLY
(SHOWN, REPLACE PREMIER P/N B30-23000-11)
D3155-042 BRACKET ASSEMBLY
(OPPOSITE, REPLACES PREMIER P/N B30-23000-12)

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3155-041	BRACKET ASSEMBLY
	X	D3155-042	BRACKET ASSEMBLY
1		D3155-1	BRACKET
	1	D3155-2	BRACKET
2	2	D3155-3	BUSHING

NOTE:

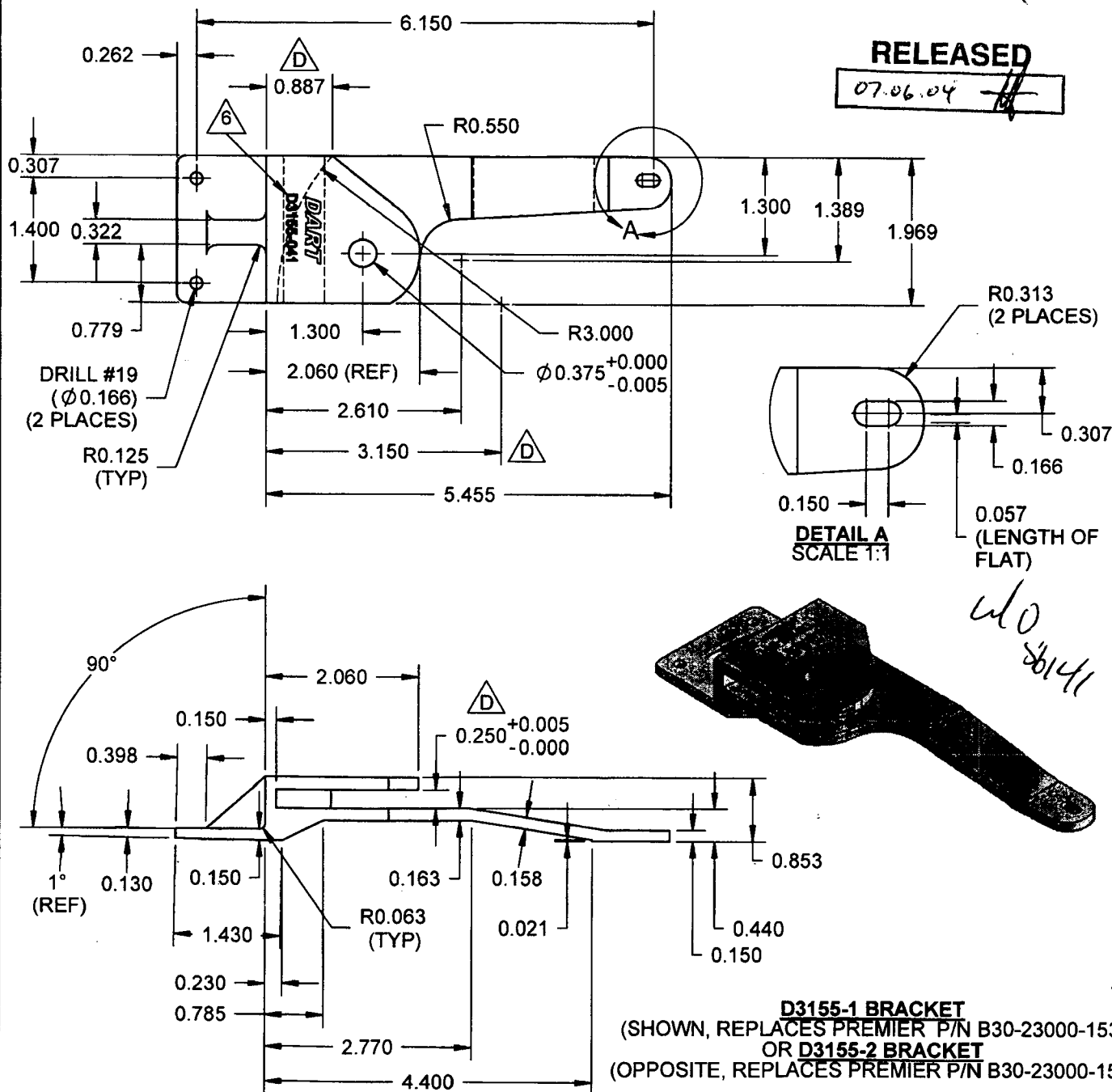
⚠ MAINTAIN THE 0.250^{+0.005}_{-0.000} DIMENSION AFTER PRESS FITTING THE BUSHING.

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DART

DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED #	DRAWING NO. D3155	REV. D SHEET 2 OF 3
DATE 07.01.18	TITLE BRACKET ASSEMBLY		SCALE 1:2

**NOTES:**

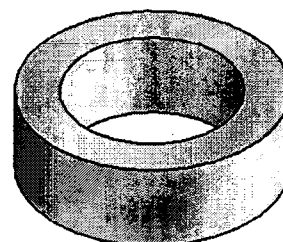
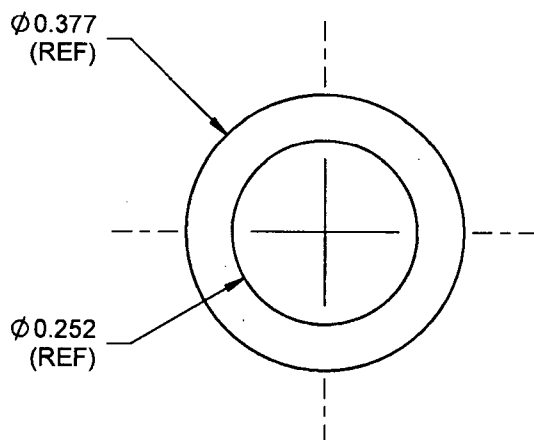
- 1) MATERIAL: ALUMINUM BAR 6061-T6/-T651 PER QQ-A-225/8 OR QQ-A-200/8 OR AMS 4117 OR AMS 4128 OR AMS 4115 OR AMS 4116 OR AMS 4160 (REF DART SPEC M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO AS SHOWN TO MAX DEPTH OF 0.010 WITH A MIN RAD OF 0.010

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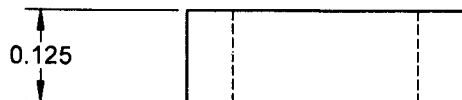


DESIGN <i>AF</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>CE</i>	APPROVED <i>AF</i>	DRAWING NO. D3155	REV. D SHEET 3 OF 3
DATE 07.01.18		TITLE BRACKET ASSEMBLY	SCALE 4:1



RELEASED

07.06.04 *AF*



W/O 56141

D3155-3 BUSHING

NOTES:

- 1) MATERIAL: MAKE FROM SBS-3-3 (SOLID BAR) OR SS-812-20 (TUBING)
POSSIBLE SUPPLIER: SYMMCO
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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